



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,224	03/23/2004	Cheng Linn Teo	200313679-1	5031
22879	7590	11/28/2006	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				MORRISON, THOMAS A
ART UNIT		PAPER NUMBER		
				3653

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/808,224	TEO ET AL.	
	Examiner	Art Unit	
	Thomas A. Morrison	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 September 2006.
2a) This action is **FINAL**. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) 7-11 is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-6 and 12-17 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 23 March 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/23/04, 8/16/05.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
5) Notice of Informal Patent Application
6) Other: ____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-6 and 12-17 in the reply filed on 09/18/2006 is acknowledged. Claims 7-11 have been withdrawn, as being directed to a non-elected invention.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, (1) the recited "mechanical means coupled thereto for operating the printhead" as set forth in claim 3; and (2) the recited "mechanical means coupled thereto for operating the printhead" as set forth in claim 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: (1) the recited "mechanical means coupled thereto for operating the printhead" of claims 3 and 14 should be given a reference numeral(s) in the specification, since each of these is a claimed element.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 4-6 and 12-13 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,029,020 (Blackman et al.).

Regarding claim 1, Figs. 1-10 show a duplex system (including 14 and 22) for an inkjet printer having a printhead for printing a media sheet, the system comprising:

a front duplex module (including 14); and
a back duplex module (including 22) detachably coupled to the front duplex module (14), wherein the front duplex module (including 14) comprises a first roller assembly (including 60) for advancing the media sheet to the printhead (12) along a simplex media path; and a second roller assembly (including 78) disposed along the simplex media path for handling the media sheet.

Regarding claim 2, Figs. 1-10 show that the first and second roller assemblies (including 60 and including 78) are coupled to each other (via gear linkage 84) to provide a coordinated control for handling the media sheet.

Regarding claim 4, Figs. 1-10 show that the back duplex module (including 22) comprises:

a duplex media path (including 52); and
a duplex roller (44) for receiving the media sheet from the front duplex module (including 14) and advancing the same to the first roller assembly (including 60) along the duplex media path (including 52), wherein the duplex roller (44) is disposed downstream from the second roller assembly (including 78) along the duplex media path (including 52). See e.g., Figs. 6 and 7.

Regarding claim 5, Figs. 1-10 show that the front duplex module (including 14) further comprises a duplex media path entry (i.e., the end of element 76, near the point where element 76 and element 68 are joined) through which the media sheet is

advanced backward (See Figs. 2 and 6-7) to the back duplex module (including 22) for flipping the media sheet.

Regarding claim 6, column 6, lines 48-57 disclose that the second roller assembly (including 78) is capable of advancing the media sheet in forward and backward directions.

Regarding claim 12, Figs. 1-10 show an ink jet printer comprising:
a printhead (12) for printing a media sheet; and
a duplex system wherein the duplex system comprises a front duplex module (including 14); and

a back duplex module (including 22) detachably coupled to the front duplex module (including 14), wherein the front duplex module (including 14) comprises a first roller assembly (including 60) for advancing the media sheet to the printhead (12) along a simplex media path; and a second roller assembly (including 78) disposed along the simplex media path for handling the media sheet.

Regarding claim 13, Figs. 1-10 show that the first and second roller assemblies (including 60 and including 78) are coupled to each other to provide a coordinated control for handling the media sheet.

Regarding claim 15, Figs. 1-10 show that the back duplex module (including 22) comprises:

a duplex media path (including 52); and a duplex roller (44) for receiving the media sheet from the front duplex module (including 14) and advancing the same to the first roller assembly (including 60) along the duplex media path (including 52), wherein

the duplex roller (44) is disposed down stream from the second roller assembly (including 78) along the duplex media path (including 52).

Regarding claim 16, Figs. 1-10 show that the front duplex module (including 14) further comprises a duplex media path entry (i.e., the end of element 76, near the point where element 76 and element 68 are joined) through which the media sheet is advanced backward to the back duplex module (including 22) for flipping the media sheet.

Regarding claim 17, column 6, lines 48-57 disclose that the second roller assembly (including 78) is capable of advancing the media sheet in forward and backward directions.

5. Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,042,791 (Stemmle).

Regarding claim 1, Figs. 1-8 show a duplex system for an inkjet printer having a printhead for printing a media sheet, the system comprising:

a front duplex module (including 10); and
a back duplex module (including 40) detachably coupled to the front duplex module (10), wherein the front duplex module (10) comprises a first roller assembly (including 28) for advancing the media sheet to the printhead (including 12) along a simplex media path; and a second roller assembly (including 32) disposed along the simplex media path for handling the media sheet.

Regarding the recitation, "for an inkjet printer", this is merely a statement of intended use. As such, it has not been given any patentable weight.

Regarding claim 3, Figs. 1-8 show that the printhead (including 12) is disposed between the first and second roller assemblies (including 28 and including 32) with a distal displacement between the first and second roller assemblies (including 28 and including 32) being determined by the space required by the printhead (including 12) and mechanical means coupled thereto for operating the printhead (including 12). In particular, the distance between elements 28 and 32 along the paper path is larger than the width of the printhead (including 12) and its driving mechanism along such paper path between elements 28 and 32. Otherwise, one or both of these elements (i.e., 28 and 32) would interfere with the printhead (including 12) and its driving mechanism. This distal displacement between elements 28 and 32 along the paper path satisfies the requirements of claim 3.

Regarding claim 5, Figs. 1-2 show that the front duplex module (10) further comprises a duplex media path entry through which the media sheet is advanced backward to the back duplex module (40) for flipping the media sheet.

6. Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,055,820 (Saito et al.).

Regarding claim 1, Figs. 1-8 show a duplex system (Fig. 3) for an inkjet printer having a printhead for printing a media sheet, the system comprising:

- a front duplex module (including 20 and 60); and
- a back duplex module (including 80) detachably coupled to the front duplex module (including 20 and 60), wherein the front duplex module (including 20 and 60) comprises a first roller assembly (including 43) for advancing the media sheet to the

printhead (including 31) along a simplex media path; and a second roller assembly (including 50) disposed along the simplex media path for handling the media sheet.

Regarding claim 3, Figs. 1-8 show that the printhead (including 31) is disposed between the first and second roller assemblies (including 43 and including 50) with a distal displacement between the first and second roller assemblies (including 43 and including 50) being determined by the space required by the printhead (including 31) and mechanical means coupled thereto for operating the printhead (including 31). In particular, the distance between elements 43 and 50 along the paper path is larger than the width of the printhead (including 31) and its driving mechanism along such paper path between elements 43 and 50. Otherwise, one or both of these elements (i.e., 43 or 50) would interfere with the printhead (including 31) and/or its driving mechanism. This distal displacement between elements 43 and 50 along the paper path satisfies the requirements of claim 3.

Regarding claim 5, Figs. 1-8 show that the front duplex module (including 20 and 60) further comprises a duplex media path entry (i.e., near 63 in Fig. 3) through which the media sheet is advanced backward to the back duplex module (including 80) for flipping the media sheet.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,042,791 (Stemmle) in view of U.S. Patent No. 6,029,020 (Blackman et al).

Regarding claim 12, Figs. 1-8 show a printer comprising:

a printhead (including 12) for printing a media sheet; and

a duplex system wherein the duplex system comprises a front duplex module (10); and

a back duplex module (40) detachably coupled to the front duplex module (10), wherein the front duplex module (10) comprises a first roller assembly (including 28) for advancing the media sheet to the printhead (including 12) along a simplex media path; and a second roller assembly (including 32) disposed along the simplex media path for handling the media sheet.

The Stemmle patent discloses most of the elements of claim 12, but does not specifically disclose an ink jet printer. Stemmle discloses one embodiment that is an electrostatographic printer, but also suggests that the teachings of Stemmle are equally applicable to a wide variety of other types of printers. See e.g., column 5, lines 15-23 of Stemmle.

The Blackman et al. patent discloses that it is well known to provide a printer that performs duplexing with an ink jet device (12). See e.g., Figs. 1-2 and column 3, lines 10-12 of Blankman et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the electrostatographic device of Stemmle with an ink jet device, because this merely replaces one well known printing device with another well known printing device that performs essentially the same function and is equally applicable to the teachings of Stemmle, as suggested by Stemmle.

Regarding claim 14, Figs. 1-8 of Stemmle show that the printhead (including 12) is disposed between the first and second roller assemblies (including 28 and including 32) with a distal displacement between the first and second roller assemblies (including 28 and including 32) being determined by the space required by the printhead (including 12) and mechanical means coupled thereto for operating the printhead (including 12). In particular, the distance along the paper path between elements 28 and 32 is larger than the width of the printhead (including 12) and its driving mechanism along such paper path between elements 28 and 32. Otherwise, one or both of these elements (i.e., 28 and 32) would interfere with the printhead (including 12) and/or its driving mechanism. This distal displacement between elements 28 and 32 along the paper path satisfies the requirements of claim 14.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/15/2006



PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600